

Notice of Allowability**Application No.**

10/781,080

Applicant(s)

SADANADA, SANTOSH KUMAR

Examiner

Andrew C. Lee

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2476

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated 7/27/2009.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 11/15/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/05/2009
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Andrew C Lee/
Examiner, Art Unit 2476

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Eric Replogle on 11/04/2009.
3. The application has been amended as follows:
 - Claim 21 has been amended as following:
21. (Currently Amended) A method performed in an access node of a wave division multiplexing optical network, the method comprising:

searching, in response to a demand for a first protection path that meets a first set of disjointness constraints with respect to a first working path, in a database for [[a]] the first protection path that meets the first set of disjointness constraints; ~~and~~

if the first protection path cannot be located, searching for a second protection path that meets a second set of disjointness constraints and is currently assigned as a protection path for ~~another~~ second working path, the second set of disjointness constraints being determined according to a disjointness preference order specified by an owner of the network; and

assigning the second protection path as a protection path to the first working path if the first priority of the first protection scheme of the first working path is higher than the second priority of the second protection scheme of the second working path.
- Claim 24 has been amended as following:
24. (Currently Amended) An apparatus, comprising:

an access node, to be coupled in a wavelength division multiplexing optical network, including,

a database to store a representation of available paths from the access node to reachable destinations, the available paths including one or more working paths protected by one or more protection paths, and

a routing module to search, in response to a demand for a protection path that meets a first set of disjointness constraints with respect to a first working path, in a database for a first protection path that meets the first set of disjointness constraints, and

if the first protection path cannot be located, search for a second protection path that meets a second set of disjointness constraints and is currently assigned as a protection path for another second working path, the second set of disjointness constraints being determined according to a disjointness preference order specified by an owner of the network, and
assign the second protection path as a protection path to the first working path if the first priority of the first protection scheme of the first working path is higher than the second priority of the second protection scheme of the second working path.

- Claim 27 has been amended as following:

27. (Currently Amended) A method performed in an access node of a wave division multiplexing optical network, the method comprising:

receiving a demand for a first protection path associated with a first working path according to a first protection scheme having a first priority, and
preempting a second protection path that is a protection path of a second working path according to a second protection scheme having a second priority, if the first priority is higher than a second priority according to a protection scheme priority order specified by an owner of the network; and
assigning the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme.

- Claim 30 has been amended as following:

30. (Currently Amended) An apparatus, comprising:

an access node, to be coupled in a wavelength division multiplexing optical network, including,

a database to store a representation of available paths from the access node to reachable destinations, the available paths including one or more working paths protected by one or more protection paths, and

a routing module to receive a demand for a first protection path that is a protection path of a first working path according to a first protection scheme having a first priority, and

preempt a second protection path associated with a second working path according to a second protection scheme having a second priority, if the first priority is higher than a second priority according to a protection scheme priority order specified by an owner of the network, and

assign the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme.

Allowable Subject Matter

4. Claims 1 – 32 are allowed.

Reasons For Allowance

5. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, fails to disclose explicitly the limitations of:

"in response to the demand, locating a second protection path that meets a second set of disjointness constraints with respect to a second working path according to a second protection scheme having a second priority, wherein the second protection path is a protection path for the second working path; and

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assigning the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme” as disclosed in claim 1.

“a routing module to receive a demand for a first protection path that meets a set of disjointness constraints with respect to a first working path according to a first protection scheme having a first priority, in response to the demand, locate from the database a second protection path that meets a second set of disjointness constraints with respect to a second working path according to a second protection scheme having a second priority, wherein the second protection path is a protection path for the second working path, and assign the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme” as disclosed in claim 11.

“if the first protection path cannot be located, searching for a second protection path that meets a second set of disjointness constraints and is currently assigned as a protection path for second working path, the second set of disjointness constraints being determined according to a disjointness preference order specified by an owner of the network; and assigning the second protection path as a protection path to the first working path if the first priority of the first protection scheme of the first working path is higher than the second priority of the second protection scheme of the second working path” as disclosed in claim 21.

“a routing module to search, in response to a demand for a protection path that meets a first set of disjointness constraints with respect to a first working path, in a database for a first protection path that meets the first set of disjointness constraints, if the first protection path cannot be located, search for a second protection path that meets a second set of disjointness constraints and is currently assigned as a protection path for second working path, the second set of disjointness constraints being determined according to a disjointness preference order specified by an owner of the network, and assign the second protection path as a protection path to the first working path if the first priority of

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the first protection scheme of the first working path is higher than the second priority of the second protection scheme of the second working path" as disclosed in claim 24.

"preempting a second protection path that is a protection path of a second working path according to a second protection scheme having a second priority, if the first priority is higher than a second priority according to a protection scheme priority order specified by an owner of the network; and assigning the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme" as disclosed in claim 27.

"a routing module to receive a demand for a first protection path that is a protection path of a first working path according to a first protection scheme having a first priority, preempt a second protection path associated with a second working path according to a second protection scheme having a second priority, if the first priority is higher than a second priority according to a protection scheme priority order specified by an owner of the network, and assign the second protection path as a protection path to the first working path if the first priority of the first protection scheme is higher than the second priority of the second protection scheme" as disclosed in claim 30.

6. Additionally, all of the further limitations in claims 2 – 10, 12 – 20, 22, 23, 25, 26, 28, 29 31, 32 are allowable since the claims are dependent upon independent claims, respectively.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2476
<11/06/2009:1Qy10>

/Salman Ahmed/
Primary Examiner, Art Unit 2476